

Exhibit 36

TITLE: PEEK Post Process Evaluation

2W
5/25/94

OBJECTIVE: To determine the post extrusion process conditions for different extrusion runs. Five of the extrusions were completed at ACS and one extrusion at Accutech.

MATERIALS:

<u>Description</u>	<u>Part Number</u>	<u>Source</u>	<u>Conditions/Comments</u>
PEEK	EXTR.# 10-552-1	in-house	Water bath was 8 degrees (c)
PEEK	EXTR.# 10-554-1	in-house	Was air cooled extrusion
PEEK	EXTR.# 10-553-1	in-house	Water bath was 70 degrees (c)
PEEK	EXTR.# 10-543	in-house	
PEEK	EXTR.# 581	in-house	
PEEK	AP0001842	outside vendor	

Notes:

Runs number 543 and 581 have similar extrusion run conditions.

PROCEDURES:

Necking: Place a .031" Teflon mandrel inside the PEEK and with a hot box set at 475 degrees (f) try to neck the material. Necking is done at the end of the Teflon mandrel while tension is applied where there is no mandrel.

Expanding: Use a .042" ID TFE sheath and hot box set at 500 (f) with 110 psi and expand.

Rating Matrix

<u>Part Number</u>	<u>Expanding</u>	<u>Necking</u>	<u>Surface</u>
EXTR.# 10-552-1	N/A	N/A	Terrible
EXTR.# 10-543	Good	Good	Bumps
EXTR.# 10-554-1	Good	Good	Good
EXTR.# 10-553-1	Good	Good	Terrible
EXTR.# 581	Good	Good	Bumps
AP0001842	Good	*OK	Very Good

* See dimensions below

Comments:

Expanding

EXTR.# 10-552-1	Material was not tested because of the terrible surface finish.
EXTR.# 10-543	Easily performed and controllable.
EXTR.# 10-554-1	Easily performed and controllable.
EXTR.# 581	Easily performed and controllable.
EXTR.# 10-553-1	Easily performed and controllable.
AP0001842	Easily performed and controllable.

Necking:

EXTR.# 10-552-1	Material was not tested because of the terrible surface finish.
EXTR.# 10-543	Easily performed and controllable. At 475 (f) the OD was.033"
EXTR.# 10-554-1	Easily performed and controllable. At 475 (f) the OD was.033"
EXTR.# 581	Easily performed and controllable. At 475 (f) the OD was.033"
EXTR.# 10-553-1	Easily performed and controllable. At 475 (f) the OD was.033"
AP0001842	Easily performed and controllable. At 475 (f) the OD was .036"

CONCLUSION:

- Except for extrusion #10-552-1, all of the extrusions were able to be tested.
- With regards to the necking process, the in house extrusions were able to obtain thinner walls. I believe this was due to the elongation properties they possess.
- Expanding was about equal for all except for extrusion #10-552-1.
- The in-house extrusion process needs to improve the outer surface finish.
- The Accutech surface finish, I would consider clinically acceptable.

RECOMMENDATION:

- Another post process that will require investigating is proximal markers.
- During the expanding process the TFE becomes very soft and probably dimensionally unstable due to the high heat. Glass molds may have to replace the TFE capture tube.
- Advise the Safety Department of the high temperature processing condition.
- Continue improving in-house extrusion process.